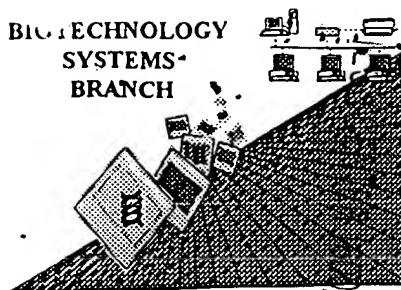


RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS-
BRANCH



1642
#18
RECEIVED
NOV 29 2001

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/451 739 D
Source: AU 1600
Date Processed by STIC: 11/02/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/45/7390

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY P

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 <210> sequence id number
 <400> sequence id number
 000
- 9 ✓ Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

1600

RAW SEQUENCE LISTING

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:22

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

1 <110> APPLICANT: Jager, Dirk
 2 Scanlan, Matthew
 3 Gure, Ali
 4 Jager, Elke
 5 Knuth, Alexander
 6 Old, Lloyd
 7 Chen, Yao-tseng

Does Not Comply
 Corrected Diskette Needed

9 <120> TITLE OF INVENTION: Isolated Nucleic Acid Molecules Encoding Cancer Associated
 Antigens,

10 the Antigens per se, and Uses Thereof
 12 <130> FILE REFERENCE: LUD 5615
 14 <140> CURRENT APPLICATION NUMBER: 09/451,739D
 16 <141> CURRENT FILING DATE: 1999-11-30
 18 <160> NUMBER OF SEQ ID NOS: 19
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 1533
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Homo sapiens

W--> 25 <220> FEATURE:
 26 <221> NAME/KEY: CDS
 27 <222> LOCATION: 235
 28 <223> OTHER INFORMATION: unknown

W--> 29 <400> SEQUENCE: 1

30 ggtttttccac gtttgacaag tgcggctcgg cggccagcgg agcgcgcccc ttcccgtcgc 60
 32 ccgctccgct cctctcttct acccagccca gtgggcgagt gggcagcggc ggccgcggcg 120
 34 ctgggcccctc tcccgcgggt gtgtgcgcgc tegtacgcgc ggcccccgcc gccagccccg 180
 W--> 36 ccgcctgaga gggggcctgc gccgcgggcc ggggcgtgcg cccgggagcc accgctaccg 240
 38 cggccccgcgc cctcaggcgc tggggtcccc gcggaccggc aggcggcgga cgggctcggc 300
 40 agatgtagcc gccgggcccga agcaggagcc ggcggggggg cggcgggaga gcgagggtct 360
 42 tgcatttttgc agtgcatttt tttgaggggg gcggagggtg gaggaagtgc gaaagccgcg 420
 44 ccgagtcgcc ggggacctcc ggggtgaacc atgttgagtc ctgccaacgg ggagcagctc 480
 46 cacctggtga actatgtgga ggaactacct gactccatcg agtccctgcc ttctgacttg 540
 48 cagagaaatg tctcgtgat gcgggagatc gacgcgaaat accaagagat cctgaaggag 600
 50 ctagacgagt gctacgagcg cttcagtcgc gagacagacg gggcgagaa gcggcgatg 660
 52 ctgcaactgtg tgcagcgcgc gctgatccgc agccaggagc tgggcgacga gaagatccag 720
 54 atcgtgagcc agatggtgga gctggtggag aaccgcacgc ggcaggtgga cagccacgtg 780
 56 gagctgttcg aggcgcagca ggagctgggc gacacagcgg gcaacagcgg caaggctggc 840
 58 gcggacaggc ccaaaggcga ggcggcagcg caggctgaca agcccaacag caagcgtcga 900
 60 cggcggcagc gcaacaacga gaaccgtgag aacgcgtcca gcaaccacga ccacgacgac 960
 62 ggcgccctcg gcaaccccaa ggagaagaag gccaagacct ccaagaagaa gaagcgtctc 1020
 64 aaggccaagg cggagcgaga ggcgtccctt gccgacctcc ccatcgacct caacgaacct 1080
 66 acgtactgtc tgtgcaacca ggtctcctat ggggagatga tcggctgcga caacgacgag 1140
 68 tgccccatcg agtggttcca cttctcgtgc gtggggctca atcataaacc caagggcaag 1200
 70 tggctactgtc ccaagtgcgc gggggagaac gagaagacca tggacaaagc cctggagaaa 1260
 72 tccaaaaaag agtgggctta caacaggtag tttgtggaca ggccgctggt gtgaggagga 1320
 74 caaaataaac cgtgtattta ttacattgct gcctttgttg aggtgcaagg agtgtaaaat 1380
 76 gtatatTTTT aaagaatggt agaaaaggaa ccatttcctt catagggatg gcagtgtattc 1440
 78 tgtttgcctt ttgttttcat tggtaacgt gtaacaagaa agtggtctgt ggatcagcat 1500

Field Errors
 220
 223
 Page 5 of 7B

RAW SEQUENCE LISTING

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:22

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

```

80 tttagaaact acaaatatag gtttgattca aca 1533
83 <210> SEQ ID NO: 2
84 <211> LENGTH: 1143
85 <212> TYPE: DNA
86 <213> ORGANISM: Homo sapiens
W--> 87 <400> SEQUENCE: 2
88 gagtaacccg ataatatgcc gttgtccggc acggcgacga gaattcccag atatagcagt 60
90 agcagtgatc ccgggcctgt ggctcggggc cggggctgca gttcggaccg cctcccgcga 120
92 cccgcggggg ctcggagaca gtttcaggcc gcattcttgc tgacccgagg gtggggccgc 180
94 gcggtggcgt ggaaacagat cctgaaggag ctgacgaggt gctacgagcg cttcagtcgc 240
96 gagacagacg gggcgagaa gcggcgatg ctgcactgtg tgcagcgcgc gctgatccgc 300
98 agccaggagc tgggcgacga gaagatccag atcgtgagcc agatggtgga gctggtggag 360
100 aaccgcacgc ggcaggtgga cagccacgtg gagctgttcg aggcgcagca ggagctgggc 420
102 gacacagtgg gcaacagcgg caaggttggc gcggacaggc ccaatggcga tgcggtagcg 480
104 cagtctgaca agcccaacag caagcgtcca cggcggcagc gcaacaacga gaaccgtgag 540
106 aacgcgtcca gcaaccacga ccacgacgac ggcgccctcg gcacacccaa ggagaagaag 600
108 gccaaagacct ccaagaagaa gaagcgtccc aaggccaagg cggagcgaga ggcgtccctt 660
110 gccgacctcc ccatcgacct caacgaaccc acgtactgtc tgtgcaacca ggtctcctat 720
112 ggggagatga tcggctgcga caacgacgag tgccccatcg agtggttcca cttctcgtgc 780
114 gtggggctca atcataaacc caagggaagg tggactgtc ccaagtgcgc gggggagaac 840
116 gagaagacca tggacaaggc cctggagaaa tccaaaaaag agagggtta caacaggtag 900
118 tttgtggaca ggcgcctggt gtgaggagga caaaataaac cgtgtattta ttacattgct 960
120 gcctttgttg aggtgcaagg agtgtaaaat gtatatTTTT aaagaatgtt agaaaaggaa 1020
122 ccattccttt catagggatg gcagtgattc tgtttgcctt ttgttttcat tggtagacgt 1080
124 gtaacaagaa agtgggtctg ggatcagcat tttagaaact acaaatatag gtttgattca 1140
126 aca 1143
129 <210> SEQ ID NO: 3
130 <211> LENGTH: 742
131 <212> TYPE: DNA
132 <213> ORGANISM: Homo sapiens
W--> 133 <220> FEATURE:
W--> 134 <400> SEQUENCE: 3
135 cgccgtccac accccagcgg cctgacgct gtcccctcgc cgaccctcgc ctctggaaaa 60
137 agtgacaggc aaggccacgc cccgcgcagg gccggcctcg agcccgagc cccagggcc 120
139 tgggacgaga tcctgaagga gctagacgag tgctacgagc gtttcagtcg cgagacagac 180
141 ggggcgcaga agcggcggat gctgcactgt gtgcagcgcg cgctgatccg cagccaggag 240
143 ctgggcgacg agaagatcca gatcgtgagc cagatggtgg agctggtgga gaaccgcagc 300
145 cggcaggtgg acagccacgt ggagctgttc gaggcgcagc aggagctggg cgacacagcg 360
147 ggcaacagcg gcaaggctgg cgcggacagg cccaaaggcg aggcggcagc gcaggctgac 420
149 aagcccaaca gcaagcgttc acggcggcag cgcaacaacg agaaccgtga gaacgcgtcc 480
151 agcaaccacg accacgacga cggcgccctc ggcaacccaa aggagaagaa ggccaagacc 540
153 tccaagaaga agaagcgttc caaggccaag gcggagcgag aggcgtcccc tgcgcacctc 600
155 cccatcgacc ccaacgaacc cagctactgt ctgtgcaacc aggtctccta tggggagatg 660
157 atcggctgcg acaacgacga gtgccccatc gagtgggttc acttctcgtg cgtggggctc 720
159 aatcataaac ccaagggcaa gt 742
162 <210> SEQ ID NO: 4
163 <211> LENGTH: 857
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens

```

RAW SEQUENCE LISTING

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:22

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

W--> 166 <400> SEQUENCE: 4

```

167 cctccgagaa cgggtgtccat ggcacagggc gggaagagat aaggcctagg gaaggcgccc 60
169 ctcgggccta tccacctctt ctggggctcg gcactaggaa gcagcttccc tctcaggccc 120
171 ctttgtctcc aagccgttcc aaactgagta ccgggagacg acacaaaggg agggcggtga 180
173 cggatggcgc aggcgcggga gccgcctagg ctgctgggag tgggtgtccg gccgcggaat 240
175 ggagatcctg aaggagctag acgagtgtca cgagcgcttc agtcgcgaga cagacggggc 300
177 gcagaagcgg cggatgtctg actgtgtgca gcgcgcgtg atccgcagcc aggagctggg 360
179 cgacgagaag atccagatcg tgagccagat ggtggagctg gtggagaacc gcacgcggca 420
181 ggtggacagc cacgtggagc tgttcgaggc gcagcaggag ctgggcgaca cagcgggcaa 480
183 cagcggcaag gctggcgcgg acaggcccaa aggcgaggcg gcagcgcagg ctgacaagcc 540
185 caacagcaag cgctcacggc ggcagcgcaa caacgagaac cgtgagaacg cgtccagcaa 600
187 ccacgaccac gacgacggcg cctcgggcac acccaaggag aagaaggcca agacctcaa 660
189 gaagaagaag cgctccaagg ccaaggcgga gcgagaggcg tcccctgccg acctcccat 720
191 cgacccaac gaacccacgt actgtctgtg caaccaggtc tcctatgggg agatgatcgg 780
193 ctgcgacaac gacgagtgcc ccatcgagtg gttccacttc tcgtgcgtgg ggctcaatca 840
195 taaacccaag ggcaagt
198 <210> SEQ ID NO: 5
199 <211> LENGTH: 279
200 <212> TYPE: PRT
201 <213> ORGANISM: Homo sapiens

```

W--> 202 <400> SEQUENCE: 5

```

203 Met Leu Ser Pro Ala Asn Gly Glu Gln Leu His Leu Val Asn Tyr Val
204 1 5 10 15
206 Glu Asp Tyr Leu Asp Ser Ile Glu Ser Leu Pro Phe Asp Leu Gln Arg
207 20 25 30
209 Asn Val Ser Leu Met Arg Glu Ile Asp Ala Lys Tyr Gln Glu Ile Leu
210 35 40 45
212 Lys Glu Leu Asp Glu Cys Tyr Glu Arg Phe Ser Arg Glu Thr Asp Gly
213 50 55 60
215 Ala Gln Lys Arg Arg Met Leu His Cys Val Gln Arg Ala Leu Ile Arg
216 65 70 75 80
218 Ser Gln Glu Leu Gly Asp Glu Lys Ile Gln Ile Val Ser Gln Met Val
219 85 90 95
221 Glu Leu Val Glu Asn Arg Thr Arg Gln Val Asp Ser His Val Glu Leu
222 100 105 110
224 Phe Glu Ala Gln Gln Glu Leu Gly Asp Thr Val Gly Asn Ser Gly Lys
225 115 120 125
227 Val Gly Ala Asp Arg Pro Asn Gly Asp Ala Val Ala Gln Ser Asp Lys
228 130 135 140
230 Pro Asn Ser Lys Arg Ser Arg Arg Gln Arg Asn Asn Glu Asn Arg Glu
231 145 150 155 160
233 Asn Ala Ser Ser Asn His Asp His Asp Asp Gly Ala Ser Gly Thr Pro
234 165 170 175
236 Lys Glu Lys Lys Ala Lys Thr Ser Lys Lys Lys Lys Arg Ser Lys Ala
237 180 185 190
239 Lys Ala Glu Arg Glu Ala Ser Pro Ala Asp Leu Pro Ile Asp Pro Asn
240 195 200 205
242 Glu Pro Thr Tyr Cys Leu Cys Asn Gln Val Ser Tyr Gly Glu Met Ile
243 210 215 220

```

RAW SEQUENCE LISTING

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:22

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

245 Gly Cys Asp Asn Asp Glu Cys Pro Ile Glu Trp Phe His Phe Ser Cys
 246 225 230 235 240
 248 Val Gly Leu Asn His Lys Pro Lys Gly Lys Trp Tyr Cys Pro Lys Cys
 249 245 250 255
 251 Arg Gly Glu Asn Glu Lys Thr Met Asp Lys Ala Leu Glu Lys Ser Lys
 252 260 265 270

254 Lys Glu Arg Ala Tyr Asn Arg

255 275

258 <210> SEQ ID NO: 6

259 <211> LENGTH: 210

260 <212> TYPE: PRT

261 <213> ORGANISM: Homo sapiens

W--> 262 <220> FEATURE:

W--> 263 <400> SEQUENCE: 6

264 Met Leu His Cys Val Gln Arg Ala Leu Ile Arg Ser Gln Glu Leu Gly
 265 1 5 10 15
 267 Asp Glu Lys Ile Gln Ile Val Ser Gln Met Val Glu Leu Val Glu Asn
 268 20 25 30
 270 Arg Thr Arg Gln Val Asp Ser His Val Glu Leu Phe Glu Ala Gln Gln
 271 35 40 45
 273 Glu Leu Gly Asp Thr Val Gly Asn Ser Gly Lys Val Gly Ala Asp Arg
 274 50 55 60
 276 Pro Asn Gly Asp Ala Val Ala Gln Ser Asp Lys Pro Asn Ser Lys Arg
 277 65 70 75 80
 279 Ser Arg Arg Gln Arg Asn Asn Glu Asn Arg Glu Asn Ala Ser Ser Asn
 280 85 90 95
 282 His Asp His Asp Asp Gly Ala Ser Gly Thr Pro Lys Glu Lys Lys Ala
 283 100 105 110
 285 Lys Thr Ser Lys Lys Lys Lys Arg Ser Lys Ala Lys Ala Glu Arg Glu
 286 115 120 125
 288 Ala Ser Pro Ala Asp Leu Pro Ile Asp Pro Asn Glu Pro Thr Tyr Cys
 289 130 135 140
 291 Leu Cys Asn Gln Val Ser Tyr Gly Glu Met Ile Gly Cys Asp Asn Asp
 292 145 150 155 160
 294 Glu Cys Pro Ile Glu Trp Phe His Phe Ser Cys Val Gly Leu Asn His
 295 165 170 175
 297 Lys Pro Lys Gly Lys Trp Tyr Cys Pro Lys Cys Arg Gly Glu Asn Glu
 298 180 185 190
 300 Lys Thr Met Asp Lys Ala Leu Glu Lys Ser Lys Lys Glu Arg Ala Tyr
 301 195 200 205

303 Asn Arg

304 210

307 <210> SEQ ID NO: 7

308 <211> LENGTH: 235

309 <212> TYPE: PRT

310 <213> ORGANISM: Homo sapiens

W--> 311 <400> SEQUENCE: 7

312 Met Glu Ile Leu Lys Glu Leu Asp Glu Cys Tyr Glu Arg Phe Ser Arg
 313 1 5 10 15

RAW SEQUENCE LISTING

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:22

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

```

315 Glu Thr Asp Gly Ala Gln Lys Arg Arg Met Leu His Cys Val Gln Arg
316          20          25          30
318 Ala Leu Ile Arg Ser Gln Glu Leu Gly Asp Glu Lys Ile Gln Ile Val
319          35          40          45
321 Ser Gln Met Val Glu Leu Val Glu Asn Arg Thr Arg Gln Val Asp Ser
322          50          55          60
324 His Val Glu Leu Phe Glu Ala Gln Gln Glu Leu Gly Asp Thr Val Gly
325 65          70          75          80
327 Asn Ser Gly Lys Val Gly Ala Asp Arg Pro Asn Gly Asp Ala Val Ala
328          85          90          95
330 Gln Ser Asp Lys Pro Asn Ser Lys Arg Ser Arg Arg Gln Arg Asn Asn
331          100         105         110
333 Glu Asn Arg Glu Asn Ala Ser Ser Asn His Asp His Asp Asp Gly Ala
334          115         120         125
336 Ser Gly Thr Pro Lys Glu Lys Lys Ala Lys Thr Ser Lys Lys Lys Lys
337          130         135         140
339 Arg Ser Lys Ala Lys Ala Glu Arg Glu Ala Ser Pro Ala Asp Leu Pro
340 145         150         155         160
342 Ile Asp Pro Asn Glu Pro Thr Tyr Cys Leu Cys Asn Gln Val Ser Tyr
343          165         170         175
345 Gly Glu Met Ile Gly Cys Asp Asn Asp Glu Cys Pro Ile Glu Trp Phe
346          180         185         190
348 His Phe Ser Cys Val Gly Leu Asn His Lys Pro Lys Gly Lys Trp Tyr
349          195         200         205
351 Cys Pro Lys Cys Arg Gly Glu Asn Glu Lys Thr Met Asp Lys Ala Leu
352          210         215         220
354 Glu Lys Ser Lys Lys Glu Arg Ala Tyr Asn Arg
355 225         230         235

```

358 <210> SEQ ID NO: 8

359 <211> LENGTH: 772

360 <212> TYPE: DNA

361 <213> ORGANISM: Homo sapiens

362 <221> NAME/KEY: CDS

363 <222> LOCATION: 689,714

W--> 364 <400> SEQUENCE: 8

```

365 aaagcgttct cggcggcagc gcaacaacta gaaccgtgag aacgcgtcca gcaaccgcga 60
366 cccacgacga cgtcacctcg ggcacgcccc aggagaagaa agcccagacc tctaagaaga 120
367 agcagggtct catggccaag gcgtagcggc aggcgtcccc cgcagacctc cccatcgacc 180
368 ccagcgagcc ctctacttgg gagatgatcc gctgcgacaa cgaatgcccc atcgagtggc 240
369 tccgcttctc gtgtgtgagt ctcaaccata aaccaaagcg caagtggtag tgttccagat 300
370 gccggggaaa gaacgatggg caaagccctt gagaagtcca gaaaaaaaac agggcttata 360
371 acaggtagtt tggggacatg cgtctaatag tgaggagaac aaaataagcc agtgtgttga 420
372 ttacattgcc acctttgctg aggtgcagga agtgtaaaat gtatatTTTT aaagaatgtt 480
373 gttagaggcc gggcgcggtg gctcacgcct gtaatccag cactttggga ggccgaggcg 540
374 gtcggatcac gaggtcagga gatcgagacc atcctggcta acacggtgaa acccgcgtctc 600
375 tactaaaaat tcaaaaaaaa aattagctgg gcgtgggtggc gggcgctgt agtcccagct 660
W--> 376 attcgggagg ctgaggcagg agaattggcgt gaacctggga ggtggagctt gcaattgagcc 720
377 aaggtcgcgc cactgcactc cagcctgggc gacagagcga gactccatct ta 772
378 <210> SEQ ID NO: 9

```

VERIFICATION SUMMARY

DATE: 11/09/2001

PATENT APPLICATION: US/09/451,739D

TIME: 11:14:23

Input Set : A:\#703518v1 -DECEMBER 8 REVISED SEQUENCE LISTING NDH.txt

Output Set: N:\CRF3\11092001\I451739D.raw

L:25 M:283 W: Missing Blank Line separator, <220> field identifier
L:29 M:283 W: Missing Blank Line separator, <400> field identifier
L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:87 M:283 W: Missing Blank Line separator, <400> field identifier
L:133 M:283 W: Missing Blank Line separator, <220> field identifier
L:134 M:283 W: Missing Blank Line separator, <400> field identifier
L:166 M:283 W: Missing Blank Line separator, <400> field identifier
L:202 M:283 W: Missing Blank Line separator, <400> field identifier
L:262 M:283 W: Missing Blank Line separator, <220> field identifier
L:263 M:283 W: Missing Blank Line separator, <400> field identifier
L:311 M:283 W: Missing Blank Line separator, <400> field identifier
L:364 M:283 W: Missing Blank Line separator, <400> field identifier
L:387 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:8
L:387 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:8
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:396 M:283 W: Missing Blank Line separator, <400> field identifier
L:404 M:283 W: Missing Blank Line separator, <400> field identifier
L:412 M:283 W: Missing Blank Line separator, <400> field identifier
L:420 M:283 W: Missing Blank Line separator, <400> field identifier
L:428 M:283 W: Missing Blank Line separator, <400> field identifier
L:436 M:283 W: Missing Blank Line separator, <400> field identifier
L:446 M:283 W: Missing Blank Line separator, <400> field identifier
L:501 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:501 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:505 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:505 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:505 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:509 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:509 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:511 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:511 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:513 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:513 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:520 M:283 W: Missing Blank Line separator, <400> field identifier
L:622 M:283 W: Missing Blank Line separator, <400> field identifier
L:630 M:283 W: Missing Blank Line separator, <400> field identifier
L:638 M:283 W: Missing Blank Line separator, <400> field identifier

Errors

~~09/45193~~
09/4517390

Page 5 of 7B

Must enumerate n's

<210> 15
<211> 2030
<212> DNA
<213> Homo sapiens
<221> CDS
<222> 1628, 1752, 1758, 1769, 1789, 1873, 1908, 1915, 1933, 1970, 1976, 2022
<400> 15

ctcgtgccgt taaagatggt ctctgaagg ctaactgcgg aatgaaagt tctattcaa 60
ctaaagcctt agaattgatg gacatgcaaa ctttcaaagc agagcctccc gagaagccat 120
ctgccttcga gcctgccatt gaaatgcaaa agtctgttcc aaataaagcc ttggaattga 180
agaatgaaca aacattgaga gcagatgaga tactcccatc agaatccaaa caaaaggact 240
atgaagaaag ttcttgggat tctgagagtc tctgtgagac tgtttcacag aaggatgtgt 300
gtttacccaa ggctacacat caaaaagaaa tagataaaat aaatggaaaa ttagaagagt 360
ctctgataa tgatggtttt ctgaaggctc cctgcagaat gaaagtttct attccaacta 420
aagccttaga attgatggac atgcaaactt tcaaagcaga gcctcccgag aagccatctg 480
ccttcgagcc tgccattgaa atgcaaaagt ctgttccaaa taaagccttg gaattgaaga 540
atgaacaaac attgagagca gatcagatgt tcccttcaga atcaaaacaa aagaaggttg 600
aagaaaattc ttgggattct gagagtctcc gtgagactgt ttcacagaag gatgtgtgtg 660
tacccaaggc tacacatcaa aaagaaatgg ataaaataag tggaaaatta gaagattcaa 720
ctagcctatc aaaaatcttg gatacagttc attcttgtga aagagcaagg gaactcaaa 780
aagatcactg tgaacaacgt acaggaaaaa tggaacaaat gaaaaagaag ttttgtgtac 840
tgaaaaagaa actgtcagaa gcaaaagaaa taaatcaca gttagagaac caaaaagta 900
aatgggaaca agagctctgc agtgtgagat tgactttaaa ccaagaagaa gagaagagaa 960
gaaatgccga tatattaaat gaaaaaatta gggaagaatt aggaagaatc gaagagcagc 1020
ataggaaaga gttagaagtg aaacaacaac tgaacaggc tctcagaata caagatatag 1080
aattgaagag ttagaagaat aatttgaatc aggtttctca cactcatgaa aatgaaaatt 1140
atctcttaca tgaaaattgc atgttgaaaa aggaattgc catgctaaaa ctggaaatag 1200
ccacactgaa acaccaatac caggaaaagg aaaataaata ctttgaggac attagattt 1260
taaaagaaaa gaatgctgaa ctccagatga ccctaaaact gaaagaggaa tcattaacta 1320
aaagggcac tcaatatagt gggcagctta aagtctgat agctgagaac acaatgctca 1380
cttctaaatt gaaggaaaaa caagacaaag aaatactaga ggcagaaatt gaatcacacc 1440
atcctagact ggcttctgct gtacaagacc atgatcaaat tgtgacatca agaaaaagtc 1500

aagaacctgc ttccacatt gcaggagatg cttgtttgca aagaaaaatg aatgttgatg 1560

tgagtagtac cgatatataa caatgaggtg ctccatcaac cactttctga agctcaaagg 1620

aaatocanaa gcctaaaaat taatctcaat tatgcaggag atgctctaag agaaaataga 1680

Errored: must enumerate n's.